

IN THE CLAIMS:

Set forth below in ascending order, with status identifiers, is a complete listing of all claims currently under examination. Changes to any amended claims are indicated by strikethrough and underlining. This listing also reflects any cancellation and/or addition of claims.

Claim 1 (currently amended)

A multiple laser treatment apparatus, comprising:

(a) n lasers, wherein n > 1 and each of said n lasers delivers a laser treatment beam selected for a treatment, and wherein said laser treatment beams have different laser beam parameters; and

(b) a mirror-based optical delivery device to deliver said laser treatment beams in a combined treatment beam, wherein said optical delivery device comprises three-dimensional delivery means for scanning said combined treatment beam in a three-dimensional scanning pattern, wherein said combined treatment beam has a spot size that is less than 0.1 mm, and wherein said combined treatment beam is delivered at a substance that undergoes said treatment.

Claim 2 (previously presented)

The apparatus as set forth in claim 1, wherein said laser treatment beams have at least one of different wavelengths, different fluences, different power levels, different energy levels, different temporal parameters, different geometrical parameters, different spot sizes, different linear delivery parameters and different three-dimensional delivery parameters.

Claim 3 (previously presented)

The apparatus as set forth in claim 1, wherein said laser treatment beams have different wavelengths selected from a spectrum of wavelengths ranging from ultraviolet to far infrared.

Claims 4-5 (cancelled)

Claim 6 (previously presented)

The apparatus as set forth in claim 1, further comprising an optical component to select a laser beam parameter of one of said laser treatment beams.

Claim 7 (previously presented)

The apparatus as set forth in claim 6, wherein said optical component is one of a beam profiler, a collimator, a spherical element, an a-spherical element and a parabolic element.

Claim 8 (previously presented)

The apparatus as set forth in claim 1, further comprising means for controlling said n lasers.

Claim 9 (previously presented)

The apparatus as set forth in claim 8, wherein said means for controlling comprises a single control panel.

Claim 10 (previously presented)

The apparatus as set forth in claim 1, further comprising means for adjusting a laser beam parameter of one of said laser treatment beams.

Claim 11 (previously presented)

The apparatus as set forth in claim 1, wherein said n lasers comprise at least one of a gas laser, a liquid laser, a solid state laser, a semiconductor diode laser, a tunable laser and a flashlamp laser.

Claim 12 (previously presented)

The apparatus as set forth in claim 1, further comprising an optical path to transmit said laser treatment beams, wherein said optical path is one of an optical fiber, an articulated arm and a waveguide.

Claims 13-17 (cancelled)

Claim 18 (currently amended)

The apparatus as set forth in claim 1, wherein said optical delivery device further comprises a micromanipulator.

Claim 19 (currently amended)

The apparatus as set forth in claim 1, wherein said optical delivery device further comprises endoscopic delivery means for delivering said combined treatment beam within said substance.

Claim 20 (currently amended)

The apparatus as set forth in claim 1, wherein said optical delivery device further comprises:

n optical components aligned on an optical path to receive said laser treatment beams from said n lasers, wherein each of said n optical components directs and combines one of said laser treatment beams of said n lasers along said optical path.

Claim 21 (previously presented)

The apparatus as set forth in claim 20, wherein said n optical components comprise at least one of a wavelength selective mirror, a beam splitter and a wavelength selective filter.

Claim 22 (previously presented)

The apparatus as set forth in claim 20, wherein said optical delivery device further comprises means for adjusting a position of one of said n optical components with respect to said optical path.

Claim 23 (previously presented)

The apparatus as set forth in claim 20, wherein said optical delivery device further comprises means for selecting at least two of said laser treatment beams to be included in said combined treatment beam.

Claim 24 (cancelled)

Claim 25 (previously presented)

The apparatus as set forth in claim 1, wherein said treatment is a medical treatment, and said laser treatment beams are medically useful treatment beams.

Claim 26 (previously presented)

The apparatus as set forth in claim 1, further comprising means for diagnosing said substance to determine said treatment.

Claim 27 (previously presented)

The apparatus as set forth in claim 26, wherein said means for diagnosing comprises a diagnostic system, wherein said diagnostic system maps an area of said substance using fluorescent emission.

Claim 28 (original)

The apparatus as set forth in claim 1, wherein said apparatus is a handheld delivery apparatus.

Claim 29 (previously presented)

The apparatus as set forth in claim 28, wherein said handheld delivery apparatus is a portable and transferable miniature handheld delivery apparatus with dimensions no greater than 6" by 12" by 20".

Claim 30 (previously presented)

The apparatus as set forth in claim 1, further comprising a power source.

Claim 31 (currently amended)

A multiple laser treatment apparatus, comprising:

- (a) n lasers, wherein $n > 24$ and each of said n lasers delivers a laser treatment beam, and wherein said laser treatment beams have different laser beam parameters;
- (b) means for selecting at least two of said laser treatment beams for a treatment; and
- (c) means for simultaneously delivering said selected ones of said laser treatment beams in a combined treatment beam at a substance that undergoes said treatment, wherein said combined treatment beam has a spot size that is less than 0.1 mm.

Claim 32 (previously presented)

The apparatus as set forth in claim 31, wherein said laser treatment beams have at least one of different wavelengths, different fluences, different power levels, different energy levels, different temporal parameters, different geometrical parameters, different spot sizes, different linear delivery parameters and different three-dimensional delivery parameters.

Claim 33 (previously presented)

The apparatus as set forth in claim 31, wherein said means for selecting comprises an optical component to select a laser beam parameter of one of said laser treatment beams.

Claim 34 (previously presented)

The apparatus as set forth in claim 31, wherein said means for selecting comprises means for adjusting a laser beam parameter of one of said laser treatment beams.

Claim 35 (previously presented)

The apparatus as set forth in claim 31, wherein said means for delivering comprises a mirror-based optical delivery device.

Claims 36-37 (cancelled)

Claim 38 (previously presented)

The apparatus as set forth in claim 35, wherein said optical delivery device comprises linear delivery means for scanning said combined treatment beam in a linear scanning pattern.

Claim 39 (previously presented)

The apparatus as set forth in claim 35, wherein said optical delivery device comprises three-dimensional delivery means for scanning said combined treatment beam in a three-dimensional scanning pattern.

Claim 40 (previously presented)

The apparatus asset forth in claim 31, wherein said means for delivering comprises a micromanipulator.

Claim 41 (previously presented)

The apparatus as set forth in claim 31, wherein said means for delivering comprises endoscopic delivery means for delivering said combined treatment beam within said substance.

Claim 42 (cancelled)

Claim 43 (previously presented)

The apparatus as set forth in claim 31, further comprising means for diagnosing said substance to determine said treatment.

Claim 44 (previously presented)

The apparatus as set forth in claim 43, wherein said means for diagnosing comprises a diagnostic system, wherein said diagnostic system maps an area of said substance using fluorescent emission.

Claim 45 (currently amended)

A method for laser treatment, comprising:

(a) providing n lasers, wherein n > 2 and each of said n lasers delivers a laser treatment beam, and wherein said laser treatment beams have different laser beam parameters;

(b) selecting at least two of said laser treatment beams for a treatment, wherein said laser treatment beams have different laser beam parameters; and

(c)(b) simultaneously delivering said at least two of said laser treatment beams in a combined treatment beam at a substance that undergoes said treatment, wherein said combined treatment beam has a spot size that is less than 0.1 mm.

Claim 46 (previously presented)

The method as set forth in claim 45, wherein said laser treatment beams have at least one of different wavelengths, different fluences, different power levels, different energy levels, different temporal parameters, different geometrical parameters, different spot sizes, different linear delivery parameters and different three-dimensional delivery parameters.

Claim 47 (currently amended)

The method as set forth in claim 45, wherein selecting said at least two of said laser treatment beams comprises providing an optical component to select a laser beam parameter of one of said laser treatment beams.

Claim 48 (currently amended)

The method as set forth in claim 45, wherein selecting said at least two of said laser treatment beams comprises adjusting a laser beam parameter of one of said laser treatment beams.

Claim 49 (currently amended)

The method as set forth in claim 45, wherein simultaneously delivering said at least two of said laser treatment beams comprises providing a mirror-based optical delivery device to deliver said combined treatment beam.

Claim 50 (previously presented)

The method as set forth in claim 49, wherein said optical delivery device comprises linear delivery means for scanning said combined treatment beam in a linear scanning pattern.

Claim 51 (previously presented)

The method as set forth in claim 49, wherein said optical delivery device comprises three-dimensional delivery means for scanning said combined treatment beam in a three-dimensional scanning pattern.

Claim 52 (currently amended)

The method as set forth in claim 45, wherein simultaneously delivering said at least two of said laser treatment beams comprises providing a micromanipulator to deliver said combined treatment beam.

Claim 53 (currently amended)

The method as set forth in claim 45, wherein simultaneously delivering said at least two of said laser treatment beams comprises providing endoscopic delivery means for delivering said combined treatment beam within said substance.

Claim 54 (cancelled)

Claim 55 (previously presented)

The method as set forth in claim 45, further comprising providing means for diagnosing said substance to determine said treatment.

Claim 56 (previously presented)

The method as set forth in claim 55, wherein said means for diagnosing comprises a diagnostic system, wherein said diagnostic system maps an area of said substance using fluorescent emission.

Claims 57-68 (cancelled)

Claim 69 (currently amended)

The apparatus as set forth in claim 1, wherein said optical delivery device further comprises a first mirror, a second mirror, and means for adjusting a position of said first mirror with respect to said second mirror.

Claim 70 (previously presented)

The apparatus as set forth in claim 35, wherein said optical delivery device comprises a first mirror, a second mirror, and means for adjusting a position of said first mirror with respect to said second mirror.